## REMARKS

Claims 1, 4, 9, 10, 31, 32, 36, 39, 47, 48, 51, 59, and 60 have been amended. Claims 1, 4-12, 31-39, 42-44, 46-51, 54-56, and 58-62 are pending in the application. Reconsideration is respectfully requested in light of the following remarks.

### Section 103(a) Rejection:

The Examiner previously rejected claims 1, 4-12, 31-39, 42-44, 46-51, 54-56 and 58-62 under 35 U.S.C. § 103(a) as being unpatentable over "Error Handling Interface (H5E)" (hereinafter "H5E") in view of Lowen et al. (U.S. Patent 7,017,077) (hereinafter "Lowen"). Applicants respectfully traverse this rejection for at least the following reasons.

In the Advisory Action dated August 9, 2007, in response to Applicants' Response dated July 2, 2007, the Examiner maintained the rejections from the Final Office Action. While Applicants continue to traverse these rejections, to expedite issuance of a patent, Applicants have amended the claims to further clarify their distinctive features. Support for the amendments may be found, for example, in Fig. 2 and in paragraph [0021] of the specification. Applicants submit that rejection of the pending claims would be unsupported by the cited reference for at least the following reasons. In a telephone interview conducted between Examiner Wang and Applicant's undersigned attorney, the Examiner agreed that the above amendments would overcome the issues raised by the Examiner in the Advisory Action.

**In regard to claim 1, the cited art does not teach or suggest *in <u>each</u> of <u>two or more threads</u> of a multithreaded program, for each error generated by one or more functions executed in the thread, store an error trace element in a memory storage area <u>private to</u> the thread in accordance with an application programming interface (API) to an error trace mechanism.*** As illustrated in Fig. 2 and described in the accompanying description (e.g., paragraph [0021]) of Applicant's specification, each of the two or more

threads in the multithreaded program is associated with a particular, separate and distinct, "thread <u>private</u> data", or "<u>private</u> data area", for the thread, which is exemplary of a memory storage area <u>private to</u> the corresponding thread. Error trace elements generated for a particular thread are stored to the corresponding <u>private</u> data area, a memory storage area <u>private to</u> the thread, as is clearly illustrated in Fig. 2 and disclosed in paragraph [0021]:

> Each thread private data 100 is a storage area (memory) specific to a particular thread. Each thread may store and access data in its associated thread private data 100 for the thread. In one embodiment, when error traces are stored using thread private data, all error trace elements generated for a particular thread are recorded in the thread's private data area. Thus, each thread private data 100 may store error traces 104, if any, for its associated thread.

The H5E reference does not teach or suggest an error trace mechanism for a <u>multithreaded program</u> configured to, for each error generated by one or more functions executed in <u>each of **two or more threads**</u> in the multithreaded program, store an error trace element in a <u>memory storage area **private to** the corresponding thread</u>, as is recited in claim 1. Further, the H5E reference does not teach or suggest an error trace mechanism configured to obtain an error trace for <u>each of **two or more threads**</u> of a multithreaded program, wherein each error trace includes one or more error trace elements <u>specific to the corresponding thread</u>, as is recited in claim 1.

Lowen teaches that **one** (a *singleton*) instance of a logger is constructed, and all threads thereafter use that **one** instance. This is made clear in FIG. 3 and the accompanying discussion of the figure (col. 3, lines 24-32), which describes how "the application thread may obtain an instance of the logger". Thus, Lowen's logger is not a memory storage area <u>private to</u> any thread. That Lowen teaches a single instance of a logger is further illustrated elsewhere in the Lowen reference, for example in the Abstract:

> The method comprises executing an application which uses **<u>a logger</u>** that collects log statements, collecting at least one log statement from <u>at least one application thread</u> and storing the at least one log statement in memory.

In addition, FIG. 1 of Lowen illustrates one instance of logger 120 associated with Application 110. That the single instance of logger 120 is used by multiple threads is further expressed in the discussion of FIG. 1 at col. 2, lines 62-64:

> The logger 120 may respond to a request from threads of execution operating as part of a software application 110.

Lowen clearly teaches a single common, and thus non-private, logger for all threads, and thus Lowen does clearly not teach or suggest, for each of two or more threads of a multithreaded program, a memory storage area private to the thread. Lowen's "logger" is clearly not private to any one thread, as are the memory storage areas recited in claim 1. Since Lowen requires the same logger for all threads, H5E in view of Lowen would not suggest in each of two or more threads of a multithreaded program to store error trace elements generated in a thread in a memory storage area private to the thread.

Thus, the cited art, alone or in combination, does not teach the limitation *in each of two or more threads of the multithreaded program, for each error generated by one or more functions executed in the thread, store an error trace element in a memory storage area private to the thread*, as is recited in amended claim 1 of the instant application.

Thus, for at least the reasons presented above, the rejection of claim 1 is not supported by the cited prior art and removal thereof is respectfully requested. Similar remarks as those above regarding claim 1 also apply to claims 9, 31, 36, 39, 47, 51, and 59.

Applicants also assert that the rejection of numerous ones of the dependent claims is further unsupported by the cited art. However, since the rejection has been shown to be unsupported for the independent claims, a further discussion of the dependent claims is not necessary at this time.

## CONCLUSION

Applicants respectfully submit that the application is in condition for allowance, and prompt notice to that effect is respectfully requested.

If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5681-69401/RCK.

Respectfully submitted,

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